Listing of Claims:

1.   (currently amended) An article of manufacture including a computer-readable medium comprising:

a program interface object (PIO) for representing a particular television program within a memory of an interactive television system, the PIO comprising a separate data structure for encapsulating:

attribute data for <u>storing</u> a plurality of attributes <u>providing</u> ~~carrying~~ information about the television program;

program code for <u>carrying out</u> a plurality of user-selectable actions ~~performable by~~ <u>within</u> the interactive television system in connection with the television program, ~~the program code for causing the interactive television system to carry the respective actions~~<u>, wherein the program code comprises a routine in a machine independent format that is executable in a Java virtual machine within the interactive television system and any destination device to which the PIO is sent such that the routine does not need to be installed on the destination device prior to receiving the PIO in order to perform the associated user-selected action, and wherein at least one of the attributes provides data used as input for a routine implementing at least one of the user-selectable actions such that the routine is not required to access resources external to the PIO for the data</u>; and

graphical data for displaying a visual indicator in a graphical user interface<u>, the visual indicator comprising a pictorial icon</u> to facilitate user <u>selection of and </u>interaction with the PIO, wherein the attribute data <u>for each of the attributes</u>, <u>the</u> program code <u>for each of the routines implementing the user-selectable actions</u>, and <u>the</u> graphical data

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for the pictorial icon associated with the particular television program are transmittable as a unit from one interactive television system to another in response to the encapsulating PIO being sent between the interactive television systems.

2.   (currently amended) The computer-readable medium of claim 1, wherein the visual indicator comprises one of a graphical icon, an animated image, and a video clip, and a text description.

3.   (previously presented) The computer-readable medium of claim 1, wherein the PIO further encapsulates:

audio data for an audible indicator capable of being played back by the interactive television system.

4-5.   (canceled).

6.   (currently amended) The computer-readable medium of claim 1[[5]], wherein the PIO comprises one of a JavaBean object and a Distributed Component Object Model (DCOM) object.

7.   (previously presented) The computer-readable medium of claim 1, wherein at least one attribute comprises a title of the television program.

8.   (previously presented) The computer-readable medium of claim 1, wherein at least one attribute comprises a starting time of the television program.

9.   (previously presented) The computer-readable medium of claim 1, wherein at least one attribute comprises a running time of the television program.

10.   (previously presented) The computer-readable medium of claim 1, wherein at least one attribute comprises a description of the television program.

11.   (previously presented) The computer-readable medium of claim 1, wherein at least one attribute comprises an indication of a channel on which the television program is broadcast.

12.   (previously presented) The computer-readable medium of claim 1, wherein at least one attribute comprises a storage location of the television program.

13.   (previously presented) The computer-readable medium of claim 1, wherein at least one attribute comprises an alternative language version of another attribute.

14.   (previously presented) The computer-readable medium of claim 1, wherein at least one user-selectable action is configured to display at least one attribute of the PIO using the interactive television system.

15.   (previously presented) The computer-readable medium of claim 1, wherein at least one user-selectable action is configured to record the television program within the interactive television system.

16.   (previously presented) The computer-readable medium of claim 1, wherein at least one user-selectable action is configured to display the television program using the interactive television system.

17.   (currently amended) A method for managing television programs received by an interactive television system, the method comprising:

providing, for each of a plurality of television programs, a program interface object (PIO) for representing a respective television program within the interactive television system, the PIO comprising a discrete data structure for encapsulating attribute data for representing a plurality of attributes ~~carrying~~ providing information about the television program, program code for carrying out a plurality of user-selectable actions ~~performable by~~ within the interactive television system in connection with the television program, and graphical data for displaying a visual indicator in the form of a pictorial icon ~~displayable~~ in a graphical user interface to facilitate user selection of and interaction with the PIO, wherein the program code comprises a routine in a machine independent format that is executable in a Java virtual machine within the interactive television system and any destination device to which the PIO is sent such that the routine does not need to be installed on the destination device prior to receiving the PIO in order to perform the associated user-selected action, and wherein at least one of the attributes provides data used as input for a routine implementing at least one of the user-selectable actions such that the routine is not required to access resources external to the PIO for the data, wherein the graphical user interface is other than a grid-based electronic program guide with columns corresponding to channels;

displaying a plurality of visual indicators of respective PIOs in the graphical user interface;

receiving a user selection of a PIO through its visual indicator;

displaying a ~~context menu~~ list<u>ing the</u> ~~of~~ available actions <u>having associated</u> <u>routines within</u> ~~for~~ the selected PIO;

receiving a user selection of one of the available actions;

<u>retrieving data from at least one attribute within the PIO required by the routine</u> <u>used to implement the selected action;</u> and

executing the <u>routine</u> ~~program code~~ included with the PIO for the selected action <u>in the Java virtual machine</u> within the interactive television system.

18-19.   (canceled).

20.   (original) The method of claim 17, wherein displaying one or more visual indicators comprises:

filtering an initial set of PIOs according to user-specified filtering criteria; and

displaying visual indicators of the PIOs satisfying the filtering criteria.

21.   (original) The method of claim 17, further comprising:

receiving at least one PIO from a remote system.

22.   (original) The method of claim 17, further comprising:

transmitting at least one PIO to a remote system in response to a user command.

23.   (original) The method of claim 21, further comprising:

modifying at least one attribute of a PIO in response to a schedule change.

24.   (canceled).

25.   (previously presented) The method of claim 17, wherein at least one PIO further encapsulates audio data for an audible indicator, the method further comprising:

playing back the audible indicator using the interactive television system.

26-27.   (canceled).

28.   (currently amended) The method of claim 17 [[27]], wherein at least one PIO comprises ~~one of~~ a JavaBean object ~~and a Distributed Component Object Model (DCOM) object~~.

29.   (original) The method of claim 17, wherein at least one attribute comprises a title of a television program.

30.   (original) The method of claim 17, wherein at least one attribute comprises a starting time of a television program.

31.   (original) The method of claim 17, wherein at least one attribute comprises a running time of a television program.

32.   (original) The method of claim 17, wherein at least one attribute comprises a description of a television program.

33.   (original) The method of claim 17, wherein at least one attribute comprises an indication of a channel on which a television program is broadcast.

34.   (original) The method of claim 17, wherein at least one attribute comprises a storage location of a television program.

35.   (original) The method of claim 17, wherein at least one attribute comprises an alternative language version of another attribute.

36.   (original) The method of claim 17, wherein at least one user-selectable action is configured to display an attribute of the selected PIO using the interactive television system.

37.   (original) The method of claim 17, wherein at least one user-selectable action is configured to record a television program corresponding to the selected PIO within the interactive television system.

38.   (original) The method of claim 37, further comprising:
recording the television program at a time indicated by an attribute of the selected PIO.

39.   (original) The method of claim 17, wherein at least one user-selectable action is configured to display a television program corresponding to the selected PIO using the interactive television system.

40.   (original) The method of claim 39, further comprising:

locating a stored recording of the television program using an attribute of the selected PIO;

displaying the stored recording of the television program.

41.   (currently amended) A system for managing television programs received by an interactive television system, the system comprising:

a computer-readable medium comprising, for each of a plurality of television programs, a program interface object (PIO) for representing a respective television program within the interactive television system, the PIO comprising a discrete data structure for containing data for a plurality of attributes carrying information about the television program, program code for a plurality of user-selectable actions performable by the interactive television system in connection with the television program, and graphical data for a visual indicator in the form of a pictorial icon displayable in a graphical user interface to facilitate user selection of and interaction with the PIO, wherein the program code comprises a routine in a machine independent format that is executable in a Java virtual machine within the interactive television system and any destination device to which the PIO is sent such that the routine does not need to be installed on the destination device prior to receiving the PIO in order to perform the associated user-selected action, and wherein at least one of the attributes provides data used as input for a routine implementing at least one of the user-selectable actions such that the routine is not required to access resources external to the PIO for the data;

a display component configured to display the one or more visual indicators of respective a plurality of PIOs;

a selection component configured to receive a user selection of one of the [[a]] visual indicators corresponding to a selected PIO, wherein the selection component is further configured to display a list of user-selectable actions having associated routines in connection with the television program of the selected PIO, at least one of the actions

comprising a send action configured to transmit the PIO to a selected interactive television system of another user; and

a transmission component configured, in response to the send action being selected, to transmit, as a unit, the attribute data for each of the attributes, the program code for each of the routines implementing the user-selectable actions, and the graphical data for the pictorial icon for the particular television program associated with the selected PIO as a unit to another interactive television system selected by the user.

42. (canceled).

43. (original) The system of claim 42, wherein the list is displayed in a context-sensitive menu associated with the visual indicator of the selected PIO.

44. (original) The system of claim 41, further comprising a population component configured to filter an initial set of PIOs according to user-specified filtering criteria, wherein the display component is further configured to display the visual indicators of the PIOs satisfying the filtering criteria.

45. (original) The system of claim 41, further comprising a communication component configured to receive at least one PIO from a remote system.

46. (original) The system of claim 45, wherein the at least one PIO is received from the remote system via e-mail.

47. (canceled).

48. (currently amended) The system of claim 41, wherein at least one visual indicator comprises one of a graphical icon, an animated image, and a video clip~~, and a text description~~.

49. (previously presented) The system of claim 41, wherein at least one PIO encapsulates audio data for an audible indicator, the system further comprising:

a playback component configured to play back the audible indicator.

50-51. (canceled).

52. (currently amended) The system of claim 41[[51]], wherein at least one PIO comprises ~~one of~~ a JavaBean object ~~and a Distributed Component Object Model (DCOM) object~~.

53. (original) The system of claim 41, wherein at least one attribute comprises a title of a television program.

54. (original) The system of claim 41, wherein at least one attribute comprises a starting time of a television program.

55.   (original) The system of claim 41, wherein at least one attribute comprises a running time of a television program.

56.   (original) The system of claim 41, wherein at least one attribute comprises a description of a television program.

57.   (original) The system of claim 41, wherein at least one attribute comprises an indication of a channel on which a television program is broadcast.

58.   (original) The system of claim 41, wherein at least one attribute comprises a storage location of a television program.

59.   (original) The system of claim 41, wherein at least one attribute comprises an alternative language version of another attribute.

60.   (original) The system of claim 41, wherein the display component is further configured to display an attribute of the selected PIO using the interactive television system.

61.   (original) The system of claim 41, further comprising:

a recording component configured to record a television program corresponding to the selected PIO using the interactive television system.

62.   (original) The system of claim 61, wherein the recording component is further configured to record the television program at a time indicated by an attribute of the selected PIO.

63.   (original) The system of claim 41, wherein the display component is further configured to display a television program corresponding to the selected PIO using the interactive television system.

64.   (original) The system of claim 63, further comprising:

a playback component configured to locate a stored recording of the television program using an attribute of the selected PIO, and display the stored recording of the television program.

65. (currently amended) A method for managing television programs received by an interactive television system, the method comprising:

providing, for each of a plurality of television program_s_, a program interface object (PIO) for representing a respective television program within the interactive television system, the PIO comprising a distinct object for containing data for a plurality of attributes carrying information about the television program, program code for a plurality of user-selectable actions performable by the interactive television system in connection with the television program, and graphical data for a[[n]] pictorial icon displayable in a graphical user interface to facilitate user selection of interaction with the PIO, including access to the user-selectable actions via a context menu displayed in response to a selection of the visual indicator, wherein the graphical user interface is other than a grid-based electronic program guide with rows corresponding to channels, wherein the program code comprises a routine in a machine independent format that is executable in a Java virtual machine within the interactive television system and any destination device to which the PIO is sent such that the routine does not need to be installed on the destination device prior to receiving the PIO in order to perform the associated user-selected action, and wherein at least one of the attributes provides data used as input for a routine implementing at least one of the user-selectable actions such that the routine is not required to access resources external to the PIO for the data;

filtering an initial set of PIOs according to user-specified filtering criteria based on genres of the respective television programs;

displaying the pictorial icons in the graphical user interface corresponding only to the PIOs satisfying the filtering criteria;

receiving a user selection of an icon corresponding to a selected PIO;

displaying a list of user-selectable actions associated with the selected PIO;

receiving a user selection of an action associated with the selected PIO from the list; and

executing the ~~routine~~ <u>program code</u> associated with the PIO for the selected action <u>in the Java virtual machine</u> within the interactive television system.

66.   (currently amended) A system for managing television programs received by an interactive television system, the system comprising:

means for storing, for each of a plurality of television programs, a program interface object (PIO) for representing a respective television program within the interactive television system, the PIO comprising a separate data structure for encapsulating data for a plurality of attributes carrying information about the television program, program code for a plurality of user-selectable actions performable by the interactive television system in connection with the television program, and graphical data for a visual indicator in the form of a pictorial icon displayable in a graphical user interface to facilitate user selection of and interaction with the PIO, wherein the program code comprises a routine in a machine independent format that is executable in a Java virtual machine within the interactive television system and any destination device to which the PIO is sent such that the routine does not need to be installed on the destination device prior to receiving the PIO in order to perform the associated user-selected action, and wherein at least one of the attributes provides data used as input for a routine implementing at least one of the user-selectable actions such that the routine is not required to access resources external to the PIO for the data;

means for displaying a plurality of one or more visual indicators corresponding to different PIOs in the graphical user interface;

means for receiving a user selection of a visual indicator corresponding to a selected PIO and a user selection of an action associated with the selected PIO;

means for displaying a list of user-selectable actions having associated routines in connection with the television program of the selected PIO, at least one of the actions

comprising a send action configured to send the PIO to a selected interactive television system of another user; and

  means for transmitting, in response to the send action being selected, the attribute data for each of the attributes, the program code for each of the routines implementing the user-selectable actions, and the graphical data for the pictorial icon for the particular television program associated with the selected PIO as a unit to another interactive television system selected by the user.

67.   (currently amended) A system for managing television programs received by an interactive television system, the method comprising:

a computer-readable medium storing, for each of a plurality of television programs, a program interface object (PIO) for representing a respective television program within the interactive television system, the PIO comprising a discrete object for encapsulating data for a plurality of attributes carrying information about the television program, program code for a plurality of user-selectable actions performable by the interactive television system in connection with the television program, and graphical data for a[[n]] pictorial icon displayable in a graphical user interface to facilitate user interaction with the PIO, wherein the graphical user interface is other than a grid-based electronic program guide with rows corresponding to channels, wherein the program code comprises a routine in a machine independent format that is executable in a Java virtual machine within the interactive television system and any destination device to which the PIO is sent such that the routine does not need to be installed on the destination device prior to receiving the PIO in order to perform the associated user-selected action, and wherein at least one of the attributes provides data used as input for a routine implementing at least one of the user-selectable actions such that the routine is not required to access resources external to the PIO for the data;;

a filtering component configured to filter an initial set of PIOs according to user-specified filtering criteria based on genres of the respective television programs;

an icon display component configured to display the pictorial icons in the graphical user interface corresponding to only the PIOs satisfying the filtering criteria;

an icon selection component configured to receive a user selection of an icon corresponding to a selected PIO;

an action display component configured to display a list of user-selectable actions having routines ~~associated~~ with~~in~~ the selected PIO;

an action selection component configured to receive a user selection of an action associated with the selected PIO from the list; and

an action execution component configured to execute <u>within the Java virtual machine</u> the <u>routine</u> ~~program code~~ ~~associated~~ <u>contained</u> with<u>in</u> the PIO for the selected action ~~within the interactive television system~~.